

Work Order ID 144883-2

Tuesday, April 26, 2016 2:15:46 PM

Split

144883

Page 1

Item ID: D3121-25 Accept *N9000040100* Setup Start *NS1*
 Revision ID:
 Item Name: Delrin Cap Stop *NS2*
 Start Date: 4/27/2016 Start Qty: 100.00 *100* 80 Cust Item ID:
 Required Date: 4/29/2016 Req'd Qty: 100.00 *100* 80 Customer:
 Reference:

Approvals: Process Plan: *em* Date: 16/04/26 Tooling: Date:
 QC: Date: SPC (Y/N): Date:
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3121	Rev E

100	Hardinge CNC LATHE SMALL	0.00							
100									
Hardinge	Memo	8.00							
Hardinge CNC Lathe Small	1-Turn D3121-25 Cap as per Folio FA3872-Deburr								

80 0 *16/05/03*
 DAS
 20 16-05-09
 9-89

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	1.00							
Quality Control									

80 0 *16/05/03*
 DAS
 20 16-05-09
 9-89

120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	2.00							
Quality Control									

80 0 *16/05/03*
 DAS
 08
 9-89

Work Order ID 144883

Tuesday, April 26, 2016 2:15:46 PM

144883

Page 2

Item ID: D3121-25

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Delrin Cap

Stop ***NS2***

Start Date: 4/27/2016 Start Qty: 100.00

100

Cust Item ID:

Required Date: 4/29/2016 Req'd Qty: 100.00

100

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>St</u>	0.00							
130									
Packaging	Memo	1.00			DAS 30 9-89	<u>80</u>			MAY 09 2016
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	10.00				<u>MCS</u>			MAY 10 2016
Quality Control									

MCS MAY 09 2016

Picklist Print

Tuesday, April 26, 2016 2:16:00 PM

Page 1

Work Order ID: 144883

144883

Parent Item: D3121-25

D3121-25

Parent Item Name: Delrin Cap

Start Date: 4/27/2016

Required Date: 4/29/2016

Start Qty: 100.00

Required Qty: 100.00

Comments: IPP Rev:A New Issue 06-05-10 JLM
IPP Rev:B ECN 1060 07-11-12 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDEL RINR1.000'		Purchased			No		f	25.3183		5.473684			DAS
MDFI RINR1 000									**	3.750'			20 0-00 16-05-09
Delrin Round Bar 1" color: black													

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT039	25.318274	
(m132884)	7.8103	
m132947	1.507974	
m134582	16	

3.750'

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

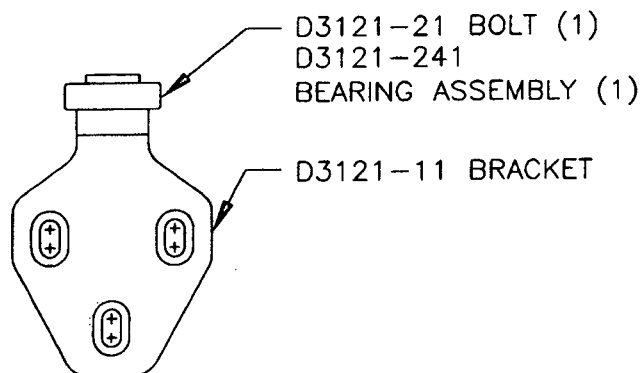
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

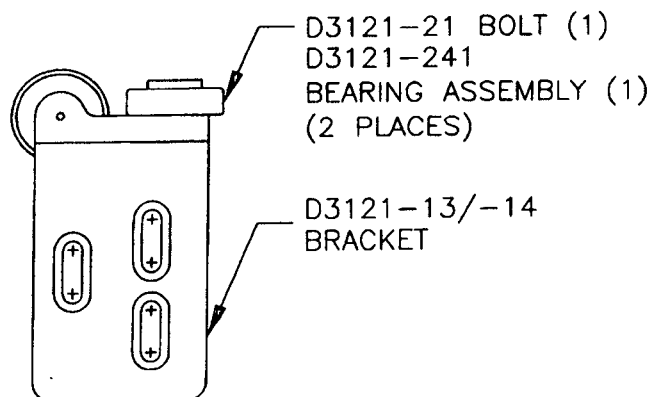


DESIGN #	DRAWN BY LE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 1 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2
A	02.04.15	NEW ISSUE	
B	03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146	
C	04.02.17	ADD CLEARANCE; USE -241 BEARING	
D	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000	
E	07.11.07	ADD TOLERANCE TO 0.032 (DETAIL B)	

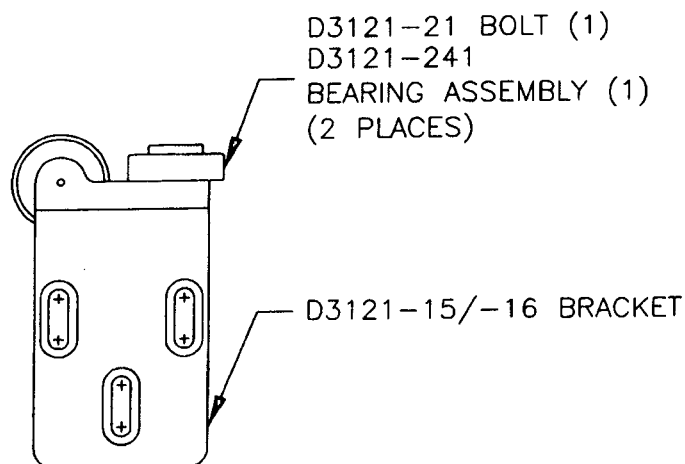
RELEASED
07.11.07



D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-37/-38)



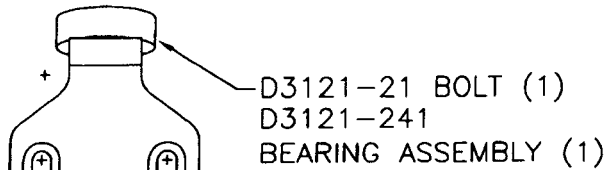
**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-35/-36)

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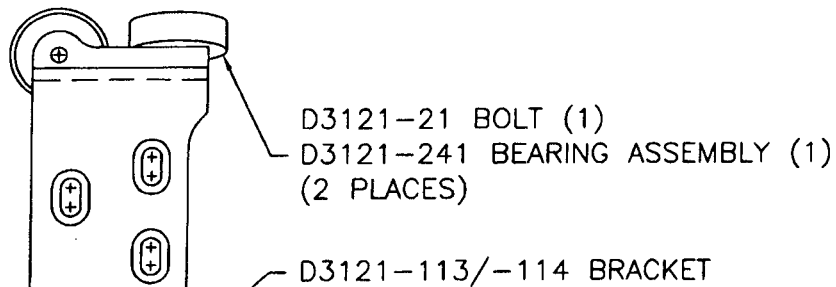
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CHECKED <i>AA</i>	APPROVED <i>AA</i>	DRAWING NO. D3121	REV. E SHEET 2 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2



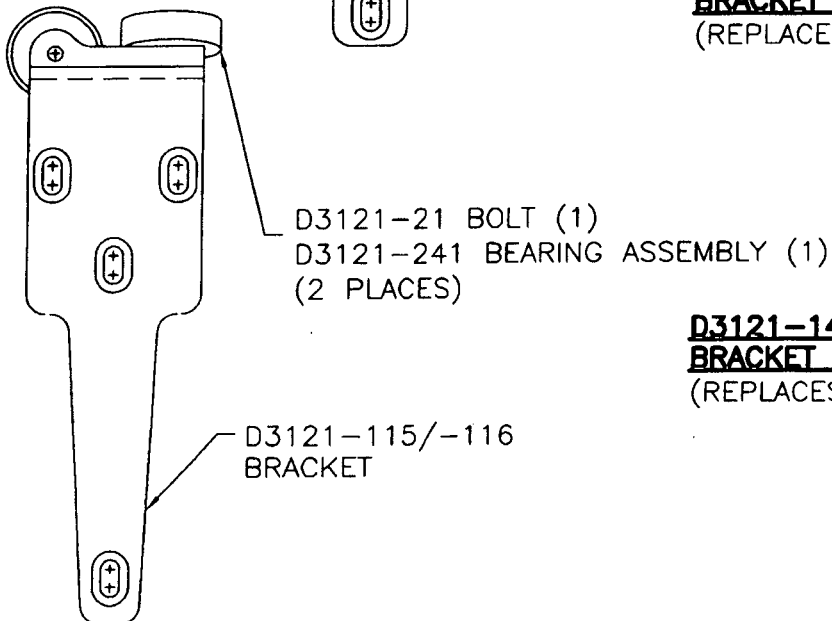
D3121-111 BRACKET

D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

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D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-03/-04)



D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-05/-06)

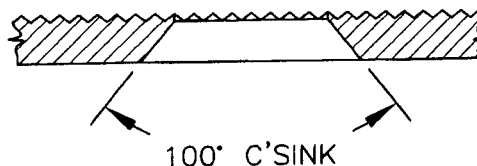
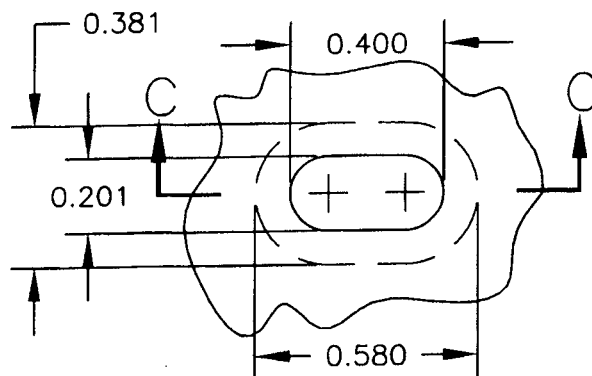
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DATE 07.11.07	TITLE BRACKET ASSEMBLY		SCALE 1:1

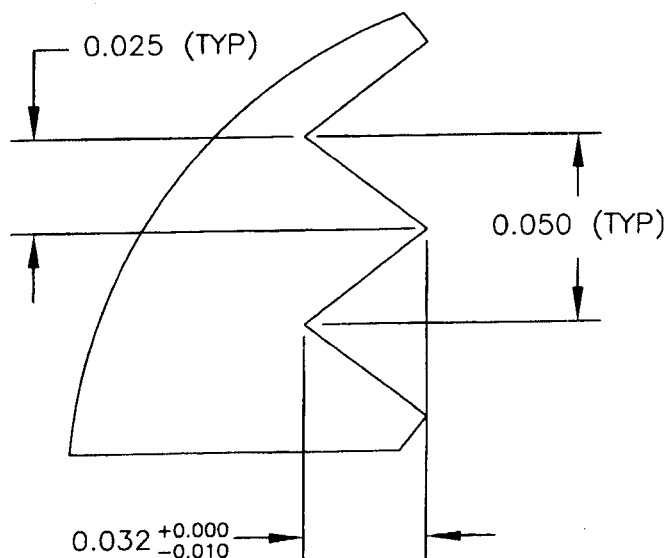
DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED



SECTION
C-C

RELEASED
07.11.07

DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20

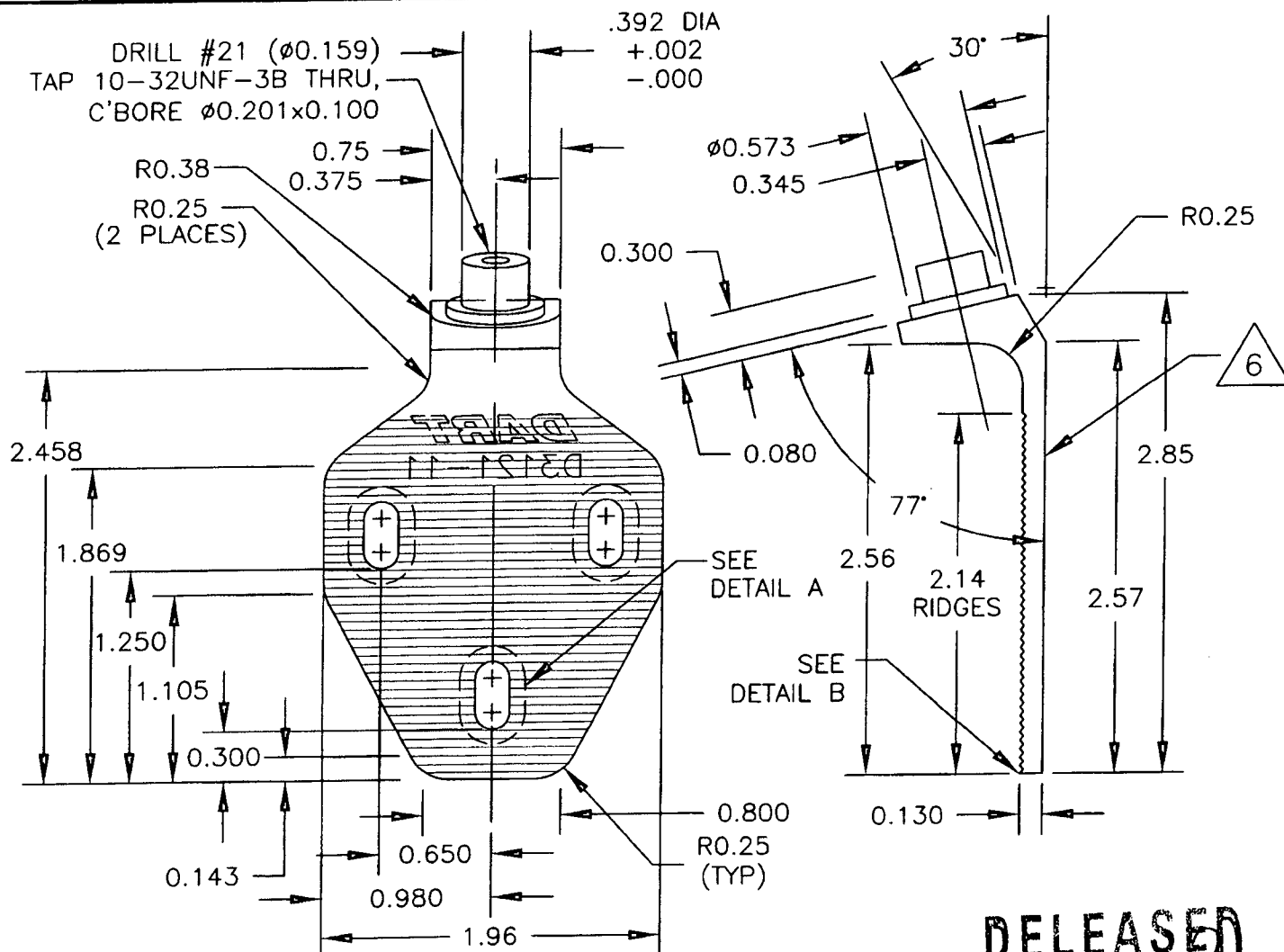


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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1



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07.11.07

D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

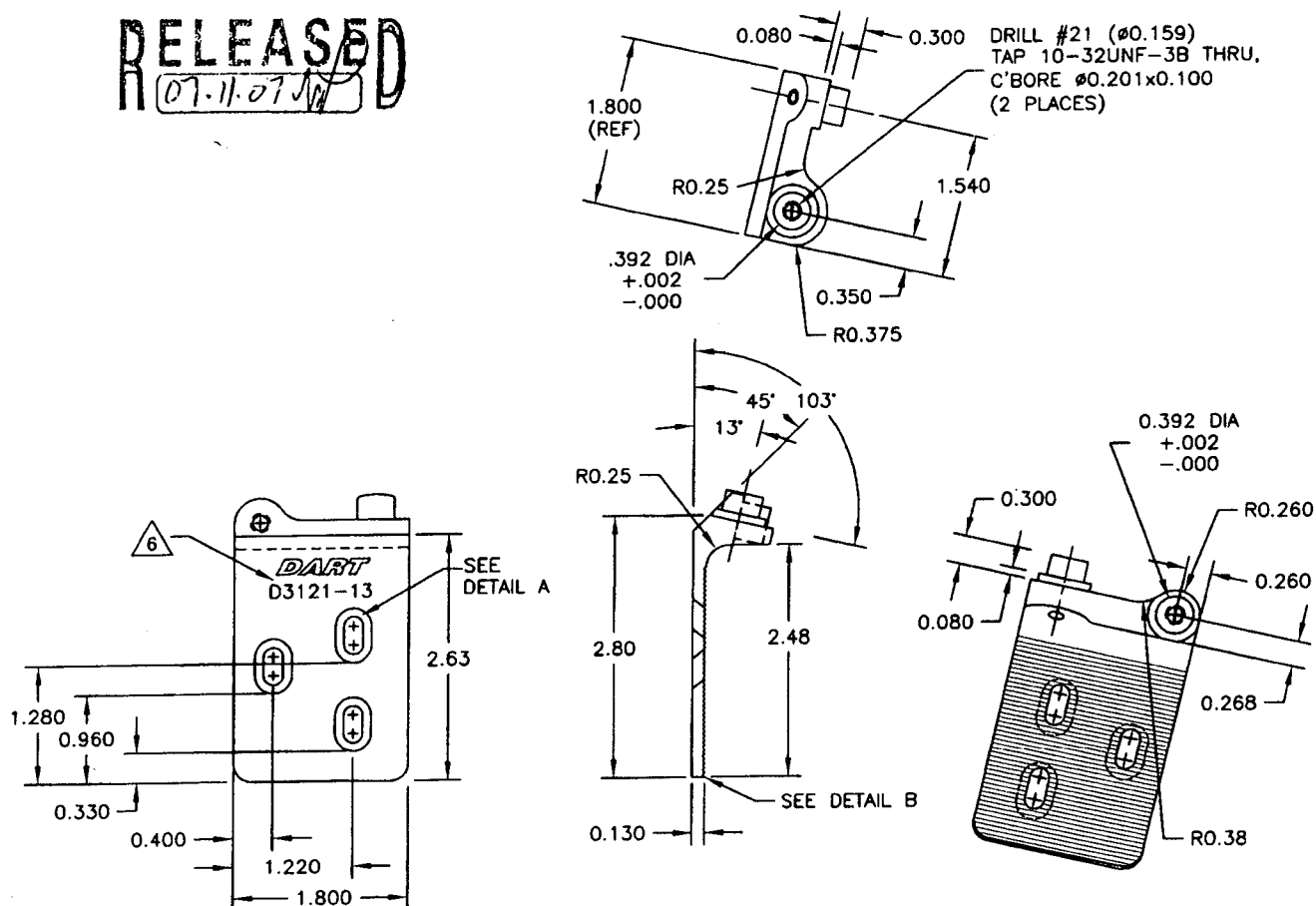
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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

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07.11.07

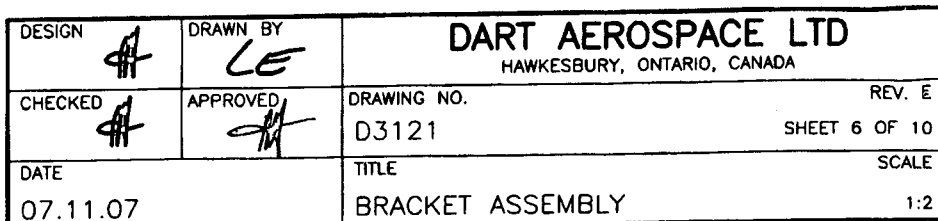


D3121-13 BRACKET (SHOWN)
D3121-14 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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07.11.07



- D3121-16 BRACKET (OFF-CENTER)
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
 - 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) ALL DIMENSIONS ARE IN INCHES
 - 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
 - 5) ENGRAVE DART P/N AND LOGO AS SHOWN
 - 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

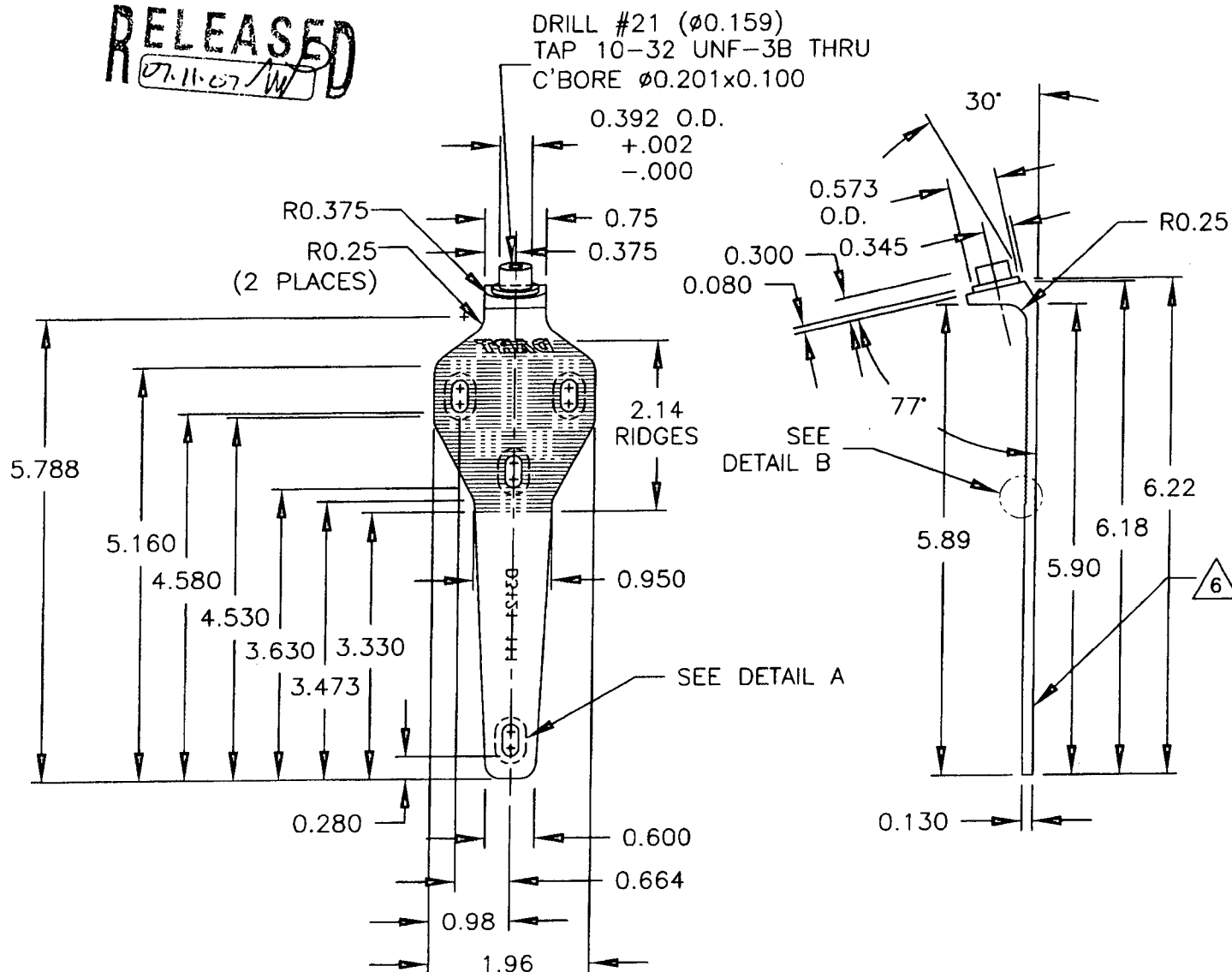
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CHECKED #A	APPROVED #A	DRAWING NO. D3121	REV. E SHEET 7 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07/W



D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

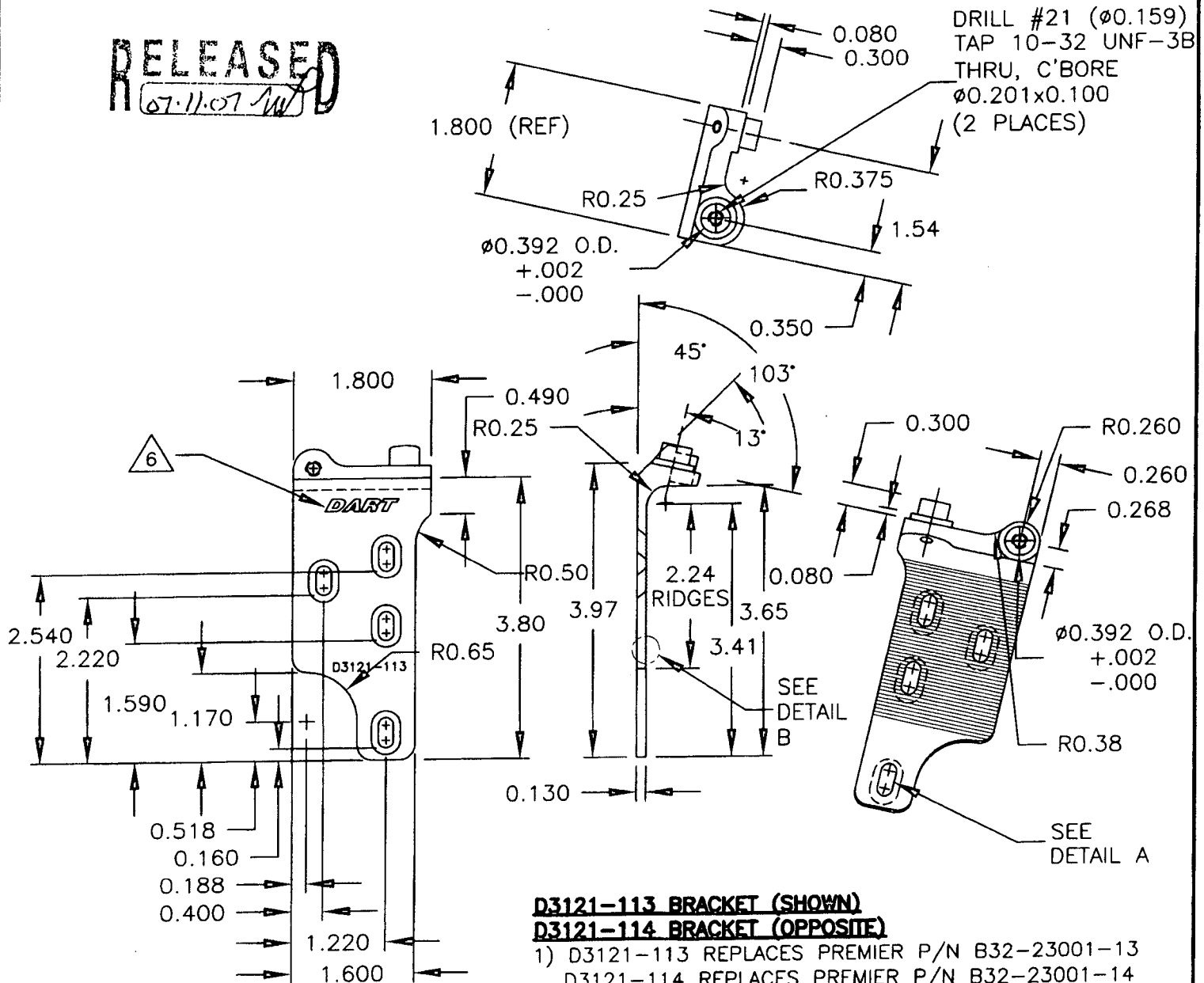
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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 8 OF 10
DATE 07.11.07	TITLE BRACKET ASSEMBLY		SCALE 1:2

RELEASED
07.11.07



D3121-113 BRACKET (SHOWN)
D3121-114 BRACKET (OPPOSITE)

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

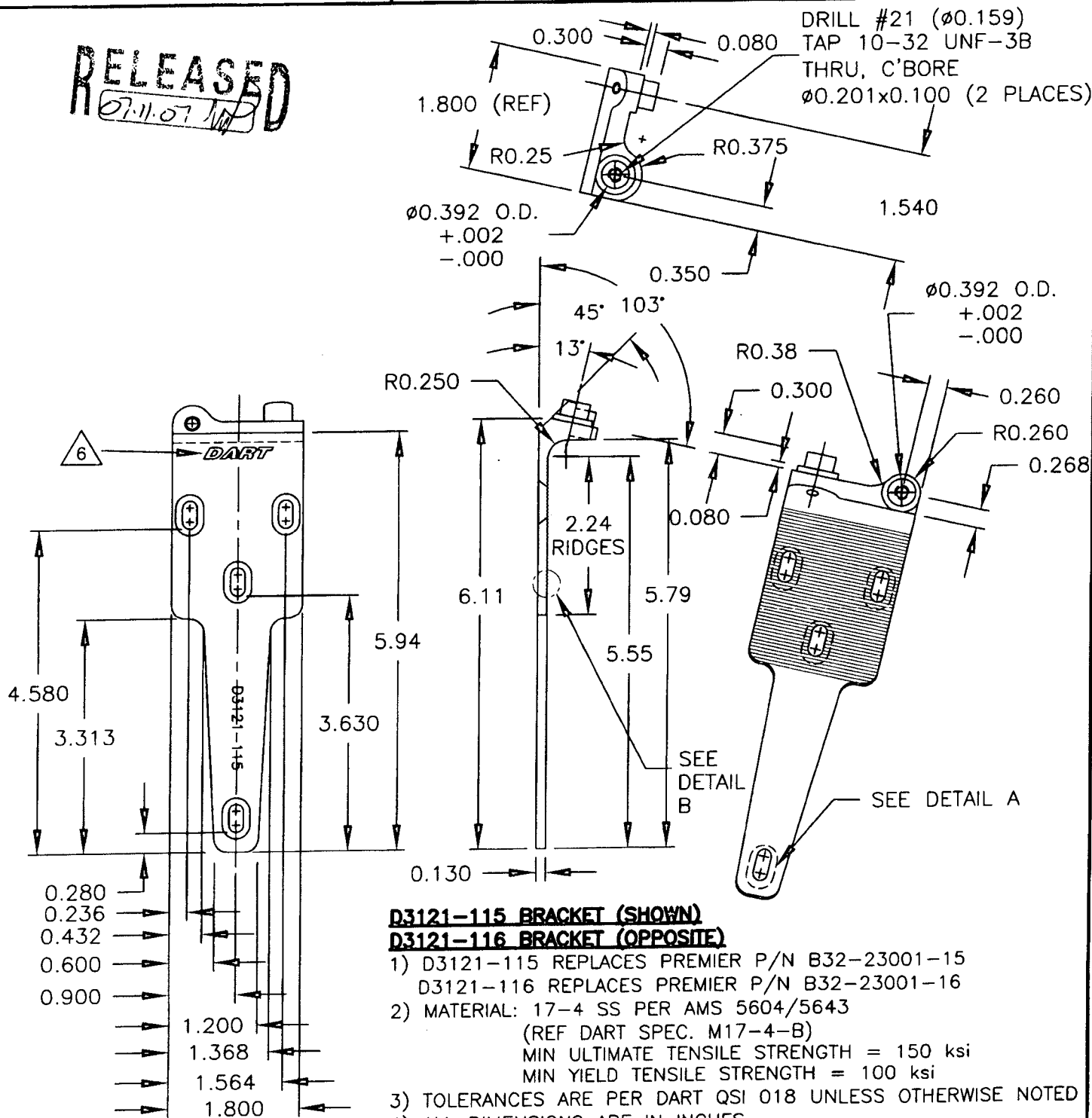
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CHECKED #1	APPROVED #1	DRAWING NO. D3121	REV. E SHEET 9 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07



D3121-115 BRACKET (SHOWN)
D3121-116 BRACKET (OPPOSITE)

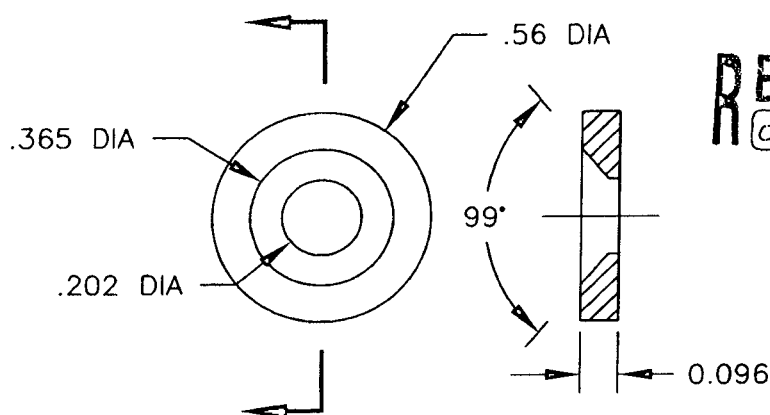
- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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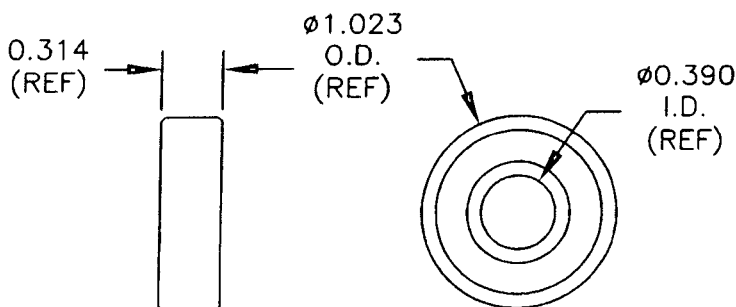


DESIGN #	DRAWN BY LE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1



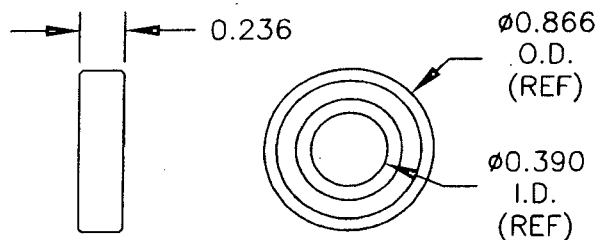
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



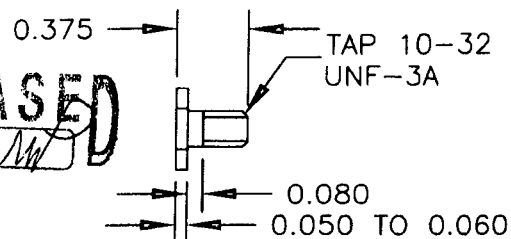
D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



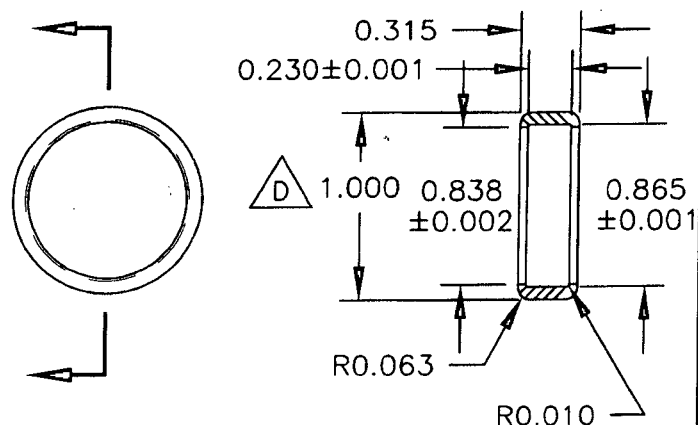
D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES



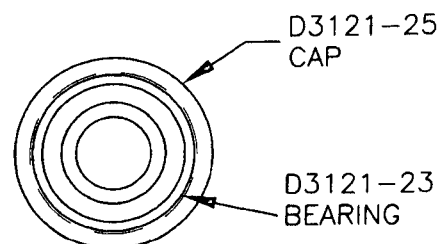
D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, 1.25 (REF DART SPEC. M-DELIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



D3121-241 BEARING ASSEMBLY (SCALE 1:1)

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